

## **HOW TO PREVENT ITB FRICTION SYNDROME!**

As the Physiotherapist for the Australian Triathlon team, prevention of injuries is the ultimate aim to ensure optimal performance on race day, free of niggling pain and injury. Whether at a recreational or competitive level, the injury patterns in triathletes are very similar. The aim of this article is to give you strategies to prevent a common injury involving the Illio-Tibial Band (ITB) that can be caused by triathlon training and competition.

### **ITB FRCTION SYNDROME**

The over-use injury, ITB friction syndrome, produces pain on the lateral or outer side of the knee during running and occasionally cycling. Pain is generally caused by an unusually tight ITB which frictions over the outer bone of the knee when it bends and straightens during running and cycling. This causes inflammation and hence pain develops.

The ITB is a length of connective tissue that runs down the lateral side of your thigh and attaches on the outer surface of your tibia or shin bone just below the knee joint. The ITB originates from the Tensor Fascia Latae (TFL) muscle that lies just below and to the outer side of the hip bone that you can feel at waist level.

One common predisposing factor that can cause ITB friction syndrome in triathletes is tightness in the hip flexors, ITB's and TFL's. One of the reasons that this pattern of tightness is extremely common in triathletes due to the length of time spent with the hip bent in the aero position whilst cycling. This causes a shortening of the anterior hip muscles.

### **PREVENTION**

One strategy essential to prevent this pattern from developing and potentially causing injury is regular hip flexor and quadriceps stretching. Whichever position you prefer to stretch your quadricep muscle group (standing, kneeling, side lying etc), keep your knees together and your gluteal muscles contracted to ensure an ideal pelvic and spinal position. The muscle groups should be stretched daily and before and after activity (especially after cycling) to optimally prevent the development of ITB symptoms. As for all stretches, they should be held for approximately 30 seconds without bouncing, performed gently and slowly to the point of tension but never pain. Self massage to the outer side of the thigh between the knee and the hip can also assist in reducing tightness in the ITB.

Another preventative strategy used in the prevention and assessment of ITB friction syndrome is to assess the triathlete's running and cycling biomechanics. The biomechanics of the Australian Squad members are routinely assessed by their respective State Institutes of Sport and/or their individual coaches. They are performed via video analysis where coaches, Physiotherapists and Biomechanists can assess running and cycling technique and prescribe various drills and strategies to aim to rectify any biomechanical flaws.

Finally, if Triathletes have any specific injuries or recurrent symptoms please seek out your local specialist Sports Physiotherapist and ensure that strategies and exercises are prescribed to not only rid yourself of the problem but prevent it from returning.

## **MARK ALEXANDER**

Mark Alexander works full-time at The Optima Group, a sports medicine centre in Newmarket (W: 3356 3312). Mark has just returned to Brisbane after 6 years, in that time working in Melbourne, Canberra, the UK, Europe, North and South America.

Mark is currently the Physiotherapist for the:

- Australian TRIATHLON team
- He worked at the COMMONWEALTH GAMES in Manchester, U.K. (2002)
- and the WORLD Championships in Cancun, Mexico (2002)

Mark has formerly worked with:

- RIVERDANCE, touring around Australia and Europe (2002-2003)
- AUSTRALIAN INSTITUTE of SPORT in Canberra (2000)
- SYDNEY OLYMPICS (2000)
- LONDON BRONCOS Rugby League team in the U.K. (1997-1999)
- WASPS Rugby Union team in the U.K. (1997)

Mark has completed:

- the LEVEL 3 Sports Physiotherapy Course at the Australian Institute of Sport
- a FIRST CLASS HONOURS degree in Physiotherapy at U.Q. (1995)
- and is currently enrolled in a MASTERS in Sports Physiotherapy degree at U.Q.

Mark enjoys Triathlon, Golf, Rugby Union, Aussie Rules and Snowboarding.

Mark Alexander works full-time at The Optima Group, a sports medicine centre in Newmarket (W: 3356 3312). Mark has just returned to Brisbane after 6 years, in that time working in Melbourne, Canberra, the UK, Europe, North and South America.

Mark is currently the Physiotherapist for the:

- Australian TRIATHLON team
- He worked at the COMMONWEALTH GAMES in Manchester, U.K. (2002)
- and the WORLD Championships in Cancun, Mexico (2002)

Mark has formerly worked with:

- RIVERDANCE, touring around Australia and Europe (2002-2003)
- AUSTRALIAN INSTITUTE of SPORT in Canberra (2000)
- SYDNEY OLYMPICS (2000)
- LONDON BRONCOS Rugby League team in the U.K. (1997-1999)
- WASPS Rugby Union team in the U.K. (1997)

Mark has completed:

- the LEVEL 3 Sports Physiotherapy Course at the Australian Institute of Sport
- a FIRST CLASS HONOURS degree in Physiotherapy at U.Q. (1995)
- and is currently enrolled in a MASTERS in Sports Physiotherapy degree at U.Q.

Mark enjoys Triathlon, Golf, Rugby Union, Aussie Rules and Snowboarding.